

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An optoelectronic-device substrate ~~including substrate~~, comprising:

~~_____ a memory-cell array including a plurality of memory cells that is arranged in matrix form and digitally driven; and~~

~~_____ a pixel electrode for retrieving to retrieve pixel data stored in the memory cells as an electrical signal;~~

~~wherein each of the memory cells has having a phase-inversion circuit for inverting to invert the phase of transmitted pixel data, and a data-inversion signal whose having a phase that is inverted by the phase-inversion circuit is being transmitted to the pixel electrode.~~

2. (Currently Amended) An ~~The~~ optoelectronic-device substrate according to Claim 1, ~~wherein each of the memory cells comprises:~~ including:

~~a storage unit for storing to store the pixel data;~~

~~a first analog switch for generating to generate the data-inversion signal, based on the phase-inversion signal; and~~

~~a second analog switch for switching to switch between the data-inversion signal from the first analog switch and a zero-data signal;~~

~~wherein the data-inversion signal is being selected when the pixel data is stored in the storage unit, and the zero-data signal is being selected when the pixel data is not stored in the storage unit so as to be transmitted to the pixel electrode.~~

3. (Currently Amended) An ~~The~~ optoelectronic-device substrate according to Claim 2, ~~wherein the phase of the data-inversion signal is being shifted so that the potential of the data-inversion signal is switched between the plus side and the minus side with reference to the potential of the zero-data signal as an approximate center potential.~~

4. (Currently Amended) An ~~The~~ optoelectronic-device substrate according to Claim 2, ~~wherein the storage unit is being formed as an SRAM.~~

5. (Currently Amended) ~~An~~ The optoelectronic-device substrate according to Claim 1, ~~wherein~~ the memory-cell array ~~comprises~~:including:

a plurality of first signal lines ~~for connecting~~to connect one group of address terminals included in one group of the memory cells in parallel, the one group of the memory cells being provided along a row direction;

a plurality of second signal lines ~~for connecting~~to connect one group of data terminals included in one group of the memory cells in parallel, the one group of the memory cells being provided along a column direction; and

a plurality of third signal lines ~~for connecting~~to connect one group of phase-inversion terminals included in one group of the memory cells in parallel, the one group of the memory cells being provided along the row direction or the column ~~direction~~direction; and

~~and wherein~~ the optoelectronic-device substrate further ~~comprises~~:including:

a first driver circuit ~~for transmitting~~to transmit address signals in sequence to the memory cells via the plurality of first signal lines, the memory cells being provided along the row direction;

a second driver circuit ~~for transmitting~~to transmit the pixel data to the memory cells at one time via the plurality of second signal lines, the memory cells being provided along the column direction; and

a third driver circuit ~~for transmitting~~to transmit phase-inversion signals to each group of the memory cells via the plurality of third signal lines, the group of the memory cells being provided along the row direction or the column direction.

6. (Currently Amended) ~~An~~ The optoelectronic-device substrate according to Claim 4, ~~wherein~~ the third driver circuit ~~has~~having a phase-inversion circuit ~~for inverting~~to invert the phase of the pixel ~~data~~data, and the phase-inversion circuit ~~inverts~~inverting the phase of the pixel data before the pixel data is transmitted to the memory cells.

7. (Currently Amended) ~~An~~ The optoelectronic-device substrate according to Claim 1, ~~wherein~~ the memory-cell array ~~comprises~~:including:

a plurality of first signal lines ~~for connecting~~to connect one group of address terminals included in one group of the memory cells in parallel, the one group of the memory cells being provided along a row direction;

a plurality of second signal lines ~~for connecting~~ to connect one group of data terminals included in one group of the memory cells in parallel, the one group of the memory cells being provided along a column direction; and

a plurality of third signal lines ~~for connecting~~ to connect one group of phase-inversion terminals included in one group of the memory cells in parallel, the one group of the memory cells being provided along the row direction or the column ~~direction~~; and

and wherein the optoelectronic-device substrate further ~~comprises~~:including:

a row-address-decoder driver circuit ~~for transmitting~~ to transmit row-address data for selecting any of rows of the memory cells via the plurality of first signal lines, the memory cells being provided along the row direction;

a column-address-decoder driver circuit ~~for transmitting~~ to transmit column-address data ~~for selecting~~ to select any of columns of the memory cells via the plurality of second signal lines, the memory cells being provided along the column direction, and the pixel data output to the memory cells designated by the row-address data and the column-address data; and

a phase-inversion driver circuit ~~for transmitting~~ to transmit a phase-inversion signal to each group of the memory cells via the plurality of third signal lines, the each group of the memory cells being provided along the row direction or the column direction.

8. (Currently Amended) ~~An~~The optoelectronic-device substrate according to Claim 7, wherein the phase-inversion driver circuit ~~has~~ having a phase-inversion circuit ~~for inverting~~ to invert the phase of the pixel data,

and wherein the phase-inversion circuit ~~inverts~~ inverting the phase of the pixel data in a predetermined cycle regardless of the number of the memory cells whose display information is rewritten according to the pixel data.

9. (Currently Amended) A digitally-driven liquid-crystal display ~~for driving a liquid crystal layer provided between~~, comprising:

~~an~~the optoelectronic-device substrate according to ~~claim 1~~claim 1; and

~~an~~a counter ~~substrate~~substrate; ~~having~~

~~a~~the liquid crystal layer provided between the optoelectronic device substrate and the counter substrate; and

a common electrode for supplying to supply a voltage whose having a potential that is equivalent to the potential of the zero data transmitted to the optoelectronic-device substrate.

10. (Currently Amended) An electronic apparatus having apparatus, comprising:
the digitally driven liquid crystal display according to claim 9; and
a display unit for displaying to display an image through the digitally-driven liquid-crystal display according to Claim 9.

11. (Currently Amended) A projector having, comprising:
a light-source unit for supplying to supply projection light, light;
a the digitally-driven liquid-crystal display according to Claim 9, 9;
a control circuit for controlling to control the digitally-driven liquid-crystal display, display; and
a projection-lens system for magnifying to magnify and projecting project an image of the digitally-driven liquid-crystal display.

12. (Currently Amended) A method for of driving an optoelectronic-device substrate comprising that includes a memory-cell array including a plurality of memory cells that is arranged in matrix form along a row direction and a column direction and that is digitally driven, and a pixel electrode for retrieving to retrieve pixel data stored in the memory cells as an electrical signal, the method comprising:

a phase inversion process for performing at least one of inverting the phase of the pixel data before the pixel data is transmitted to the memory cells, or and inverting the phase of the pixel data after the pixel data is transmitted to the memory cells.

13. (Currently Amended) A The method for of driving an optoelectronic-device substrate according to Claim 12, wherein, in the phase inversion process, the performing including:

subjecting the pixel data is subjected to pulse-width modulation, dividing one frame is divided into a plurality of sub-sub-frames, determining the potential of the zero-data signal is determined as an approximate center potential, and shifting the potential and phase of the pixel data are shifted to the plus side and the minus side so that display data in the sub sub-frames is shifted with about one-half cycles.

14. (Currently Amended) A The method for of driving an optoelectronic-device substrate according to Claim 12, wherein, in the phase inversion process, the performing

including selecting the memory cells provided along the row direction are selected in sequence sequence, and inverting the phase of the pixel data is inverted at the same time.

15. (Currently Amended) A-The method for driving an optoelectronic-device substrate according to Claim 14, wherein, in the phase inversion process, the performing including transmitting a cycle with which the phase-inversion signal is transmitted to the memory cells provided along the row direction direction, and making a cycle with which the pixel data is transmitted to the memory cells provided along the row direction are made variable so that the cycles can change in synchronization, whereby a cycle of the sub-sub- frames is made variable so as to present gray scale.